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10/731,022	12/10/2003	Toshihiko Kaku	4243-0107P	5185

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EXAMINER	
WASHINGTON, JAMARES	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
12/24/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/731,022	KAKU, TOSHIHIKO	
	Examiner	Art Unit	
	JAMARES WASHINGTON	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 29, 2008 has been entered.

Response to Amendment

Amendments and response received September 29, 2008 have been entered as stated above. Claims 1-9 are currently pending in this application. Claims 1 and 5-7 have been amended and claims 8 and 9 newly added. Amendments and response are addressed hereinbelow.

Claim Objections

2. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 4 recites "an image output apparatus according to claim 1, wherein the correcting section applies, as the processing, a red eye correcting processing in which red eyes in the image are detected and corrected. However, claim 1 previously establishes the cited limitation in which the processing carried out by the correcting section is red eye detection and correction at lines 5-8 "…a correcting section that compares the received image data with the image data to be output according to an image quality associated with a selected output mode and performs transferring image data to the image output section upon application of processing of detection and correction of a red eye condition in the image…"

Claim Rejections - 35 USC § 101

Claim(s) 8 and 9 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101" – publicly available at USPTO.GOV, "memorandum to examining corp"). The instant claims neither transform underlying subject matter nor positively

tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. In order for a process to be "tied" to another statutory category, the structure of another statutory category should be positively recited in a step or steps significant to the basic inventive concept, and NOT just in association with statements of intended use or purpose, insignificant pre or post solution activity, or implicitly.

- Structure in statements of intended use or purpose, whether in the claim or preamble, is NOT SUFFICIENT.
- Structure recited as part of insignificant pre and post solution activity is NOT SUFFICIENT (insignificant to the basic inventive concept).
- The other statutory category must be "positively" recited in the claim, NOT IMPLIED by the claim. We cannot read structure from the specification into the claim.
- The idea that a claim is INHERENTLY tied is NOT A PRIMARY CONSIDERATION. Applicant must show structure "positively recited" in the claim itself. However, we will consider arguments of inherency if applicant chooses to reply in this way.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over David Wilkins (WO/2002/031754 Note- Examiner uses US Publication of the PCT Application for rejections (US 2004/0027593)) in view of Okinori Tsuchiya (US 6980326).

Regarding claim 1, Wilkins discloses an image output apparatus (¶ [52] wherein the invention is provided on image processing servers) comprising:

an image output section that outputs an image in accordance with received image data, the image output section having a plurality of output modes mutually different from one another in output quality (¶ [52-53] wherein output resolutions range from 320x240 to 3000x3000. This suggests there must exist an output section of the system which is capable of providing a plurality of devices with the resolution needed for the devices); and

a correcting section (Although the "correcting section" is not explicitly recited within the reference, the "processes" described within the reference are implemented through a computer aided environment leading to the suggestion of output and correcting "units/sections/processors" that implement the given processes) that compares the received image data with the image data to be output according to an image quality associated with a selected output mode (¶ [89-91] wherein the original image resolution and output resolution are compared to determine which image operations would be implemented; See Fig. 4) and performs transferring image data to the image output section upon application of processing of detection and correction of a red eye condition in the image represented by the image data to the image data (¶ [66-67] wherein red-eye reduction is performed on the image data to be output).

Wilkins fails to explicitly disclose transferring image data to the image output section without application of processing of detection and correction of the predetermined inconvenience to the image data, based on the comparison between the received image data and the image to be output according to output quality related with a selected output mode.

Wilkins does disclose the red eye reduction process being a resolution dependent process (¶ [66-67] wherein the present invention teaches that red-eye reduction is normally resolution dependent. That is, depending on the resolution of the output image, red-eye may be inconspicuous. The invention goes on to explain if red-eye processing occurred on a very-low resolution image, it most likely would not be possible to even visually see the red-eye).

Given the teachings above, it would have been well within the reasoning ability of one of ordinary skill in the art to eliminate the red-eye reduction process as opposed to performing the processing on the original image as suggested by the prior art of record. A person of ordinary skill in the art would have had good reason to pursue the known option of eliminating processings that would have little to no impact on visual acuity of an output image with respect to the output size of the image (Col. 16 lines 33-44, Tsuchiya et al). It would require no more than "ordinary skill and common sense," to omit processes to images which will not visually effect the output image to save time and make for more efficient image processing.

Regarding claim 2, Wilkins discloses an image output apparatus according to claim 1, wherein the output quality is a number of pixels constituting an image (see rejection of claim 1 wherein the output quality is the resolution of the image. The resolution of an image is the number of pixels constituting an image).

Regarding claim 4, Wilkins discloses an image output apparatus according to claim 1, wherein the correcting section applies, as the processing, a red eye correcting processing in which red eyes in the image are detected and corrected (see rejection of claim 1 as this claim has failed to further limit the claimed invention as previously presented in claim 1).

Regarding claim 5, Wilkins et al discloses an image output program storage medium storing an image output program (¶ [142] wherein "a PC-based imaging application" reads on a recording medium storing a program which executes instructs to implement the method as described in claim 1), the image output program comprising the image output and correcting sections as rejected in claim 1 above.

Regarding claim 6, Wilkins discloses a server apparatus that transmits received image data to a client apparatus that outputs an image in accordance with the received image data (see rejection of claim 1 above wherein ¶ [52] discloses the invention was originally targeted for deployment on image processing servers), the server apparatus comprising:

an output quality obtaining section that obtains output quality of an image based on display characteristics associated with the client apparatus of the client apparatus (see rejection of claim 1);

an image correcting section that compares the obtained output quality of an image with a pre-stored predetermined quality and detects and corrects a red eye condition in the image represented by the image data based on the comparison, the image correcting section correcting

the red eye condition when the output quality obtained in the output quality obtaining section is higher than the pre-stored predetermined quality (see rejection of claim 1); and

an image data transmission section that transfers image data corrected in the inconvenience in the image correcting section to the client apparatus, or transfers image data not corrected in the inconvenience to the client apparatus, in accordance with a situation as to whether the output quality obtained in the output quality obtaining section is higher than the predetermined quality (see rejection of claim 1).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkins and Tsuchiya as applied to claim 1 above, and further in view of Eric C. Anderson (US 5933137).

Regarding claim 3, Wilkins in view of Tsuchiya disclose an image output apparatus according to claim 1.

Wilkins fails to expressly disclose wherein the output quality is a display time for an image.

Anderson et al, in the same field of endeavor of determining high or low quality picture output based on the needs of a user (Col. 3 lines 54-56 and Col. 7 lines 7-10 teaches the use of "low resolution" thumbnails enable the images to be reviewed more rapidly), teaches the output quality is a display time for an image (Col. 12 lines 50-58 indicates using "low resolution" image data (thumbnail data) increases the display speed). Therefore, Anderson et al teaches the display

time directly effects image quality in that if a user needs rapid viewing of images, the user should use lower resolution images.

One of ordinary skill in the art, at the time of the invention, would have easily deduced that the shorter the display time of an image, the least amount of processing would need to be done to accomplish such rapid viewing. It would have been obvious to one of ordinary skill in the art at the time of the invention for the invention as disclosed by Wilkins wherein an image output apparatus has the ability to output images to a plurality of output devices each having a plurality of output qualities to utilize the time in which the image is to be displayed as the output quality as deduced by the teachings of Anderson et al wherein the lower the resolution of the images, the faster the images can be processed and viewed, which will decrease the display time because the effect on visual acuity is well known and predictable in the art. The shorter the time an image will be viewed, the less time the less time the human visual system has to process the "defects" thereby making the "defects" imperceptible. It is well within the reasoning ability of one of ordinary skill in the art to omit image processing techniques which are ultimately imperceptible to the target audience.

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilkins and Tsuchiya as applied to claim 1 above, and further in view of Izuru Horiuchi et al (US 5646741).

Regarding claim 7, Wilkins discloses an image output system comprising a plurality of client apparatuses each outputting an image in accordance with received image data (¶ [52-53] wherein the client apparatuses are the "many computers" or client systems where the output may

be viewed), and a server apparatus that transmits image data to the client apparatuses (see rejection of claim 1),

wherein the plurality of client apparatuses include a plurality of types of client apparatuses that output images having output qualities mutually different from one another (see rejection of claim 1 wherein the different resolutions as provided), and wherein the server apparatus comprises:

an image correcting section that compares an output quality of an image associated with display characteristics of a receiving client apparatus (see rejection of claim 1 above) and detects and corrects a predetermined inconvenience as to eyes in the image represented by the image data (see rejection of claim 1);

an output quality obtaining section that obtains output quality of an image of the client apparatus (see rejection of claim 1 wherein the resolutions for the clients are the output resolutions); and

an image data transmission section that transfers image data corrected in the inconvenience in the image correcting section to the client apparatus (see rejection of claim 1), or transfers image data not corrected in the inconvenience to the client apparatus (see rejection of claim 1 above).

Wilkins fails to expressly disclose wherein the comparison of the output quality is with a pre-stored predetermined quality and the detection and correction being based on this comparison, the image correcting section correcting the red eye condition when the output quality obtained in the output quality obtaining section is higher than the pre-stored predetermined quality, wherein the data is transmitted to the output with or without correction in

accordance with a situation as to whether the output quality obtained in the output quality obtaining section is higher than the predetermined quality.

Horiuchi et al, in the same field of endeavor of image enhancements implemented in accordance with output resolution in image processing (Abstract), teaches when the enlargement reduction ratio is a predetermined value or greater, smoothing processing is more prone to be carried out to improve image quality (Col. 7 lines 63-66). Horiuchi et al teaches that if the resolution of an output device is comparatively higher than that of the original image data, images are more inclined to magnify defects and artifacts (Col. 3 lines 15-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the red eye correction method wherein a comparison of input image quality to output image quality determines image processing as disclosed by Wilkins to utilize the teachings of Horiuchi et al wherein a comparison is between the output image quality and a prestored predetermined quality and wherein if the predetermined quality is exceeded, image processing is implemented because larger images tend to reveal defects in images more-so than smaller images in which defects may be inconspicuous. The combination is well within the reasoning ability of one of ordinary skill in the art and would provide prior art elements providing the same functions as they were intended to perform to provide predictable results.

Regarding claim 8, Wilkins discloses a method for outputting image data, the method comprising:

receiving a selection of one of a plurality of output modes of original image data, at least two of the output modes having different output qualities associated therewith (see method as implemented by the apparatus in the rejection of claim 1 above);

determining the size of an output image associated with the selected output mode (see method as implemented by the apparatus in the rejection of claim 1 above);

comparing the size of the original image data with the size of the output image associated with the selected output mode (see method as implemented by the apparatus in the rejection of claim 1 above);

detecting and correcting a red eye condition in the image represented by the original image data when the size of the output image data is greater than the size of the original image data; and outputting the corrected image data or the original image based on the comparison between the size of the original image data and the size of the output image associated with the selected output mode (see method as implemented by the apparatus in the rejection of claim 8 above).

Regarding claim 9, Wilkins discloses a method for outputting image data, comprising:

determining an output quality of an image based display characteristics associated with the client apparatus (see rejection of claim 7);

comparing the determined output quality of an image with a pre-stored predetermined quality (see rejection of claim 7);

detecting and corrects a red eye condition in the image represented by the image data based on the comparison when the determined output quality his higher than the pre-stored

predetermined quality (see rejection of claim 1 and 7, utilizing the motivation to combine); and transferring red eye condition corrected image data to the client apparatus when the determined output quality if higher than the pre-stored predetermined quality, or transferring uncorrected red eye condition image data when the determined output quality is lower than the predetermined quality (see rejection of claim 7 above).

Response to Arguments

6. Applicant's arguments with respect to claims 1 and 5-7, and all claims dependent thereon, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMARES WASHINGTON whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/
Supervisory Patent Examiner, Art Unit 2625

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December 16, 2008